G. R. DAHL.

TABLE WITH FOLDING CHAIR.

APPLICATION FILED FEB. 25, 1911.

997,277.

Patented July 11, 1911.

2 SHEETS—SHEET 1.

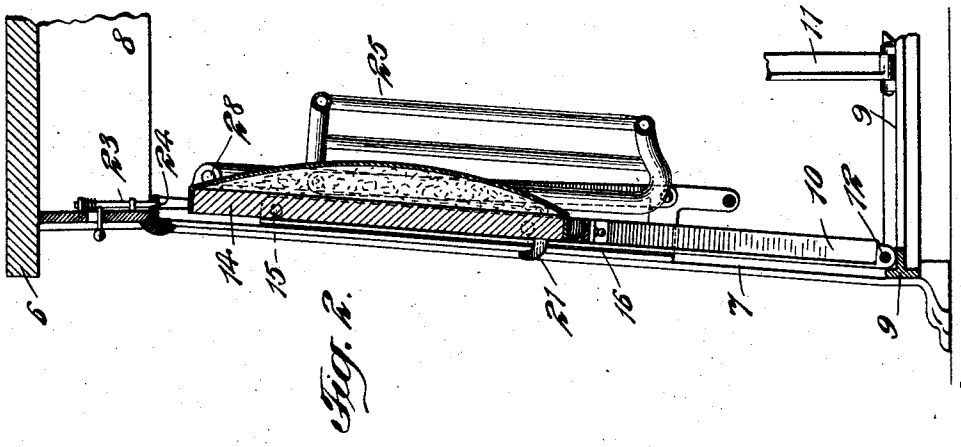

Fig. 2.

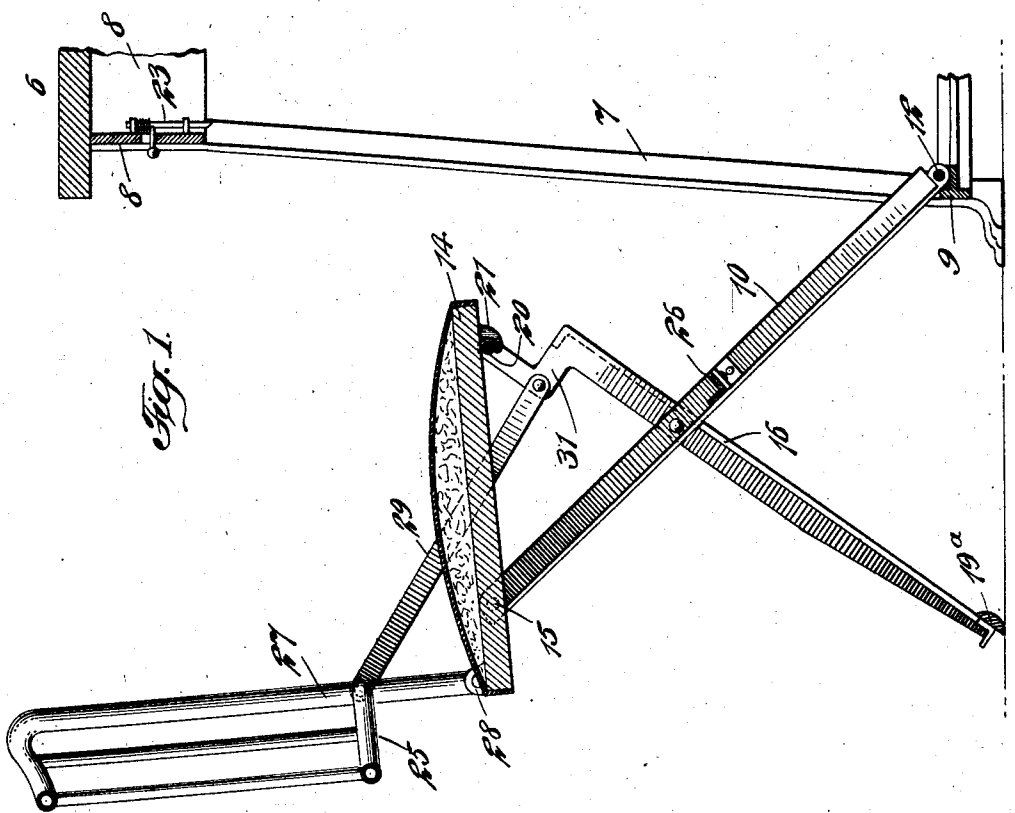

Fig. 1.

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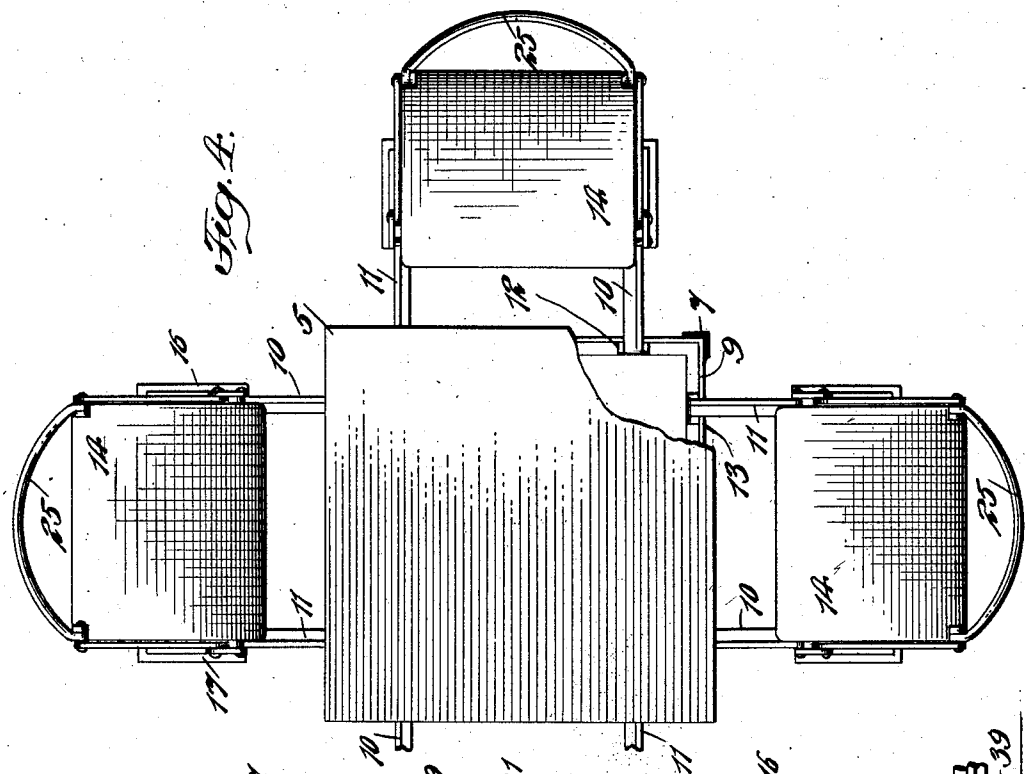
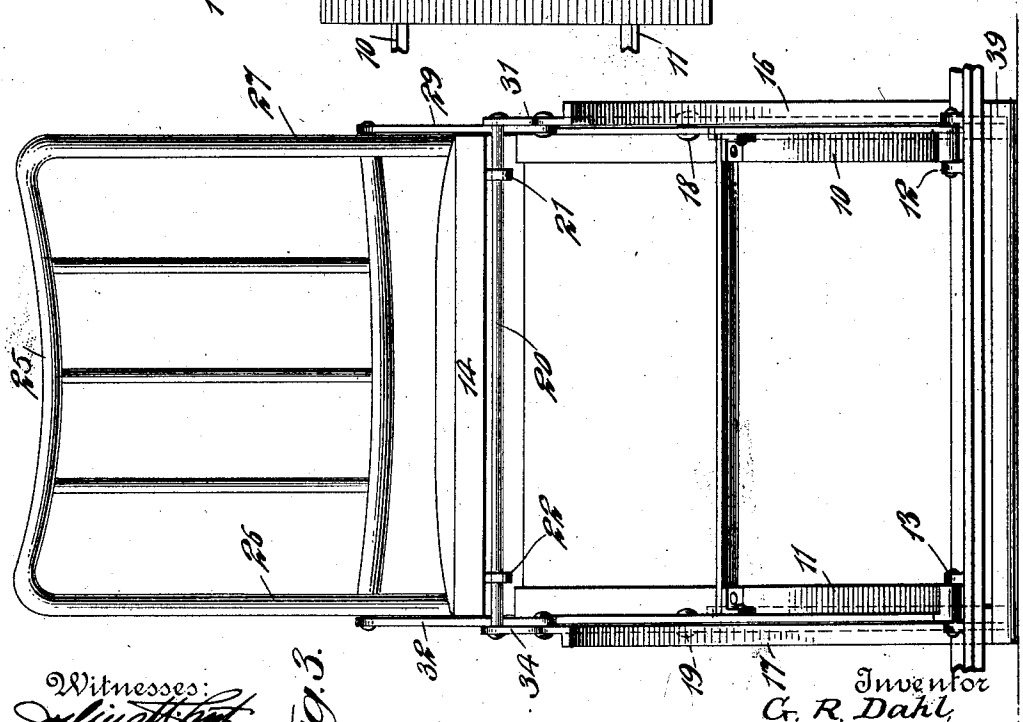


Fig. 3.



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UNITED STATES PATENT OFFICE.

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TABLE WITH FOLDING CHAIR.

997,277. Specification of Letters Patent. **Patented July 11, 1911.**

Application filed February 25, 1911. Serial No. 610,782.

To all whom it may concern:

Be it known that I, GUSTAF R. DAHL, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Tables with Folding Chairs, of which the following is a full, clear, and exact description.

The principal object of this invention is to provide a table of any desired kind, with one or a plurality of chairs that can be folded into a compact space beneath the top of the table, and which when opened out will permit persons to be seated adjacent the sides of the table; and which chair members are hinged or connected to the table in a substantially permanent manner.

A further object of the invention is to provide a device of this character in which the members of the chair are folded together in substantially a single plane, and will lie in an upright position beneath the table top, whereby the table will occupy no more room or space than it would without the chair attachment.

A further object is to provide such chairs with both a seat and a back member, that are brought together in the folding operation.

Another object is to provide in such a device, a structure in which the forward or front leg members of the chair will be permanently hinged or otherwise connected with the table member at its lower or base portion, while the rear legs of the chair will rest on the floor.

Another object is to provide such a structure that will permit a series of folding chair members to be attached at each side of the table whereby the occupant of each chair will be adjacent such side, and which will permit all the chair members to be folded up and placed beneath the top of the table, whereby the table will occupy no more than its normal space.

With these and other objects in view, the invention will be hereinafter more particularly described with reference to the accompanying drawings, which form a part of this specification, and will then be pointed out in the claims at the end of the description.

In the accompanying drawings, representing one embodiment of my invention, Figure 1 is a vertical section through one of the chair members in the open position, and the adjacent portion of the table. Fig. 2 is a similar view with the chair in the folded position. Fig. 3 is a front elevation of the chair and the connected portion of the table, in the open position; and Fig. 4 is a plan view on a reduced scale, showing a table with three chairs in the open position, and a portion of a fourth chair.

The table 5, that may be of any desired character, is shown having a top 6 that is square, and having at each corner an upright or leg member 7, only one of which is shown. These leg members at the top may be connected by side plates 8. At their lower portion or base the legs 7 may be connected by bars or braces 9, extending along each of the sides, that serve to brace the four legs and hold them together. These braces 9 may also serve for the attachment of the folding chair members.

In Fig. 4 a four-sided table is shown, provided with as many chair members, one opposite each side; but of course this number of sides to the table may be greater or less and a folding chair provided for each side as desired.

The chair members are each shown as comprising a pair of front legs formed of angle bars 10 and 11, having their lower ends connected with the braces 9 by a hinge at 12 and 13. A seat 14 is provided, of any desired kind, and is shown as pivoted to the upper ends of the front legs 10 and 11, at 15. A pair of rear legs 16 and 17, that may be of angle form at their lower portion, are pivoted at their intermediate portion to the middle portion of the front legs 10 and 11, at 18 and 19 respectively, whereby these legs on each side are crossed in the open position of the chair. The lower ends of these rear legs may engage the floor, or may be connected by a cross-bar 19^a that rests on the floor to support the chair; the front portion of the chair resting on the base portion of the table. At their upper ends the rear legs 16 and 17 have an easily movable connection with the front portion of the seat, whereby the weight of the occupant will cause the seat to be strongly supported, but the seat can be swung upward on its hinge connection with the front legs for folding the chair. The upper ends of these rear legs are shown as connected by a cross-bar 20, and lugs 21 and 22, somewhat in the form of hooks, are secured to the bottom of the

seat 14 at the front. These hooks extend rearward to form a kind of socket for engaging the bar 20, and resist a forward movement of the bar along the seat.

From such construction it follows, that the seat can be swung upward a short distance to disengage the lugs from the bar 20, whereupon the rear legs can be swung on their pivot connections with the other legs, whereby the connected legs on each side can be brought into alinement, and the flange portion of the rear legs below the pivots 15 brought to engage the portion of the front legs above the pivot. The seat can then be swung downward on the front legs until it also is brought into alinement when these legs, and its side edges will engage the inner face of the flange portion of the front legs, as shown in Fig. 2. Thereupon the folded device can be swung upward or inward on the bar 9, until the now alined legs will be brought practically into the plane of the two table legs 7 on that side. Suitable means are provided for retaining the folded chair in this position. A spring bolt 23 is shown slidable on the inner face of the side plate 8, and has its lower end arranged to enter a suitable opening 24 in the lower extremity of each bar 16 and 17. There may be one of these bolts on each side of the member 8 to engage the bar 19. The chair members may also be provided with a back, and which in the folding operation will be brought down on to the seat, so that all of the members will lie in a substantial upright position; and which back member may project inwardly from the seat member when in its folded position, and will lie underneath the top of the table. A back member 25 has its side portions 26 and 27 hinged to the rear of the seat, at points 28. A bar or link 29 has one end pivoted to the back member 27 a short distance above its lower end, while the other end of the link is pivoted to the rear leg member 16 at a place between its upper extremity and its pivotal connection with the front leg 10. This leg 16 is shown as having an offset portion 31, at which the link is pivoted to the leg member. On the other side of the chair a link 32 has one end pivoted to the side 26 of the back a short distance above its lower end, while the other end of the link 32 is pivoted to an offset portion 34 of the leg member 17. By this arrangement it will be seen that the hinged back 25 is supported by these links on each side, that will prevent its rearward movement in use. But by the folding operation, as the offset portions of the rear legs are swung downward, the back will be drawn down on to the seat and permit it to be compactly folded against the same. The operation of opening the chair when folded, will of course swing the back into position for use.

From such a construction it will be seen that the chair when in the open position has its front legs rigidly supported by the supporting means for the table which are permanently connected by hinge joints, while the rear legs of the chair rest on the floor; and the chair is thereby supported with the seat a short distance removed from the adjacent side edge of the table, permitting the occupant of the chair to use that side of the table with ease, at the same time allowing convenient access to the chair. It will be apparent that there is comparatively little strain on the table, as the connection of the front legs is in close proximity to the base of the table, and a large part of the weight of the occupant will be borne by the rear legs that rest on the floor. And further, any unevenness of the floor at the rear legs, will be taken up through the hinge connection of the front legs. It will also be understood that each chair member can be very easily and quickly folded by simply lifting the seat a short distance to disconnect the cross bar from the lugs, whereupon the front and rear leg members can be folded together, and which operation will automatically swing the seat down on to these members, and at the same time fold the back member down on to the seat. During this operation or after it has been effected, these members now lie substantially in a plane, the folded chair is swung inwardly on its hinge connection at the base of the table until the chair is brought beneath the table, when it can be secured in this position by the bolts, or otherwise. In this position each of the chair members will be located beneath the table top and will occupy no additional space other than that needed by the table itself. As stated, the table can have any desirable number of sides, and one or more of these folding chairs can be arranged at all of such sides, or at some of them. It will be further seen that no special form of table is necessary, but merely a suitable brace or the like at the lower portion of the table support.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:—

1. A chair comprising a seat, front legs hinged to the rear of said seat, rear legs pivotally connected to said front legs in crossing relation, means for detachably connecting the rear legs to the front of said seat, said rear legs having offset upper portions, a bar connecting the lower portions of the rear legs, a back rest hinged to said seat, and link connections between the offset portions of the rear legs and said back rest whereby when the rear legs are detached

from the seat and their lower portions rocked upward in folding the chair the link connections will pull the back rest onto said seat.

2. A chair comprising a seat, front legs hinged to the rear thereof, rear legs pivotally connected to the front legs and detachably connected to the front of said seat, a back rest hinged to said seat, and means for pivotally connecting the back rest to the upper portions of the said rear legs whereby when the chair is being folded the back rest will be pulled onto the seat.

This specification signed and witnessed this 21st day of February A. D. 1911.

GUSTAF R. DAHL.

Witnesses:
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